

27. NEW RECORD OF ARMY WORM *PSEUDOLETIA SEPARATA* WALKER (LEPIDOPTERA: NOCTUIDAE) AS A PEST OF RAGI IN INDIA

During May-December, 1972, observations on pest of ragi (*Eleusine coracana* L.) in some ragi fields of the Main Research Station, University of Agricultural Sciences, Hebbal revealed moderate infestation by a lepidopterous pest feeding on the foliage and the earheads. The pest was later indentified as *Pseudoletia separata* Walker.

The army worm is well known to infest a variety of food plants of cereal and millet groups. Ghosh (1924) reported it on sorghum, maize, paddy, wheat, oats and other millets. In addition to the above, pulse and vegetable crops were also found to be infested (Lefroy 1909; Fletcher 1914, and Ramchandra Rao 1924). Bindra & Rathore (1965) recorded it as a very destructive and sporadic pest of sorghum, maize, wheat and sugarcane. It was reported to cause severe damage to high yielding varieties of rice at the ripening stage of the crop by feeding on leaves and earheads (Kalode *et al.* 1972). In Mysore it is known to be a severe pest of sorghum and maize.

The present report of the damage by army worms to ragi crop from Mysore, therefore, is a new record of the pest on this host from India.

A brief account of the nature of injury by caterpillars to leaves and earheads, is given below.

The caterpillars, in the pre-earhead period, were found damaging the leaves during night making irregular cuts. The young caterpillars, in the laboratory rearings, were found to escape the leaves causing white membranous patches. The caterpillars hid below the loose soil around the base of the plant or in leaf sheath during day time. Their presence could be made out by the presence of faecal pellets strewn round the base of the plant or inside leaf sheath. About 47 per cent to 53 per cent of plants were infested. The number of larvae per clump varied from one to eight. The observations, continued till the harvest of the crop, revealed that the pest persisted and attacked the earhead in its various stages of development. They fed on the milky and later developed grains after dusk and concealed themselves by coiling at the base during daytime. The earhead thus damaged always had the faecal pellets and often with the caterpillars. The latter pupated in soil at the base of the plant or rarely inside leafsheath and in the earhead.

Further observations on its incidence and biology on ragi crop are in progress.

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28. OBSERVATIONS ON THE BIOLOGY AND HABITS OF *SYCANUS AFFINIS* REUT. (HEMIPTERA: REDUVIIDAE) AND ITS STATUS AS A PREDATOR

Sycanus affinis Reut. is a commonly occurring predator in Orissa and is found in fairly large numbers in coconut groves located in and around Bhubaneswar. The nymphs and adults of this species attack a large number of surface feeding lepidopterous larvae. So far nothing is known about the biology of this predator. However, Hoffman (1934)¹ has studied the life history of a closely related species, *Sycanus croceovittatus* Dohrn. An attempt was, therefore, made to investigate its life history and habits in order to assess its potentiality as an affective predator.

Laboratory cultures of *S. affinis* were maintained in insect cages. Ten pairs of one day old adult males and females were kept in each cage and these were supplied with full-grown larvae of *Corcyra cephalonica* S. The egg masses laid in cages were removed and kept in petri-

¹ HOFFMAN, W. E. (1934): The life-history and economic status of *Sycanus croceovittatus* Dohrn. (Hemiptera: Reduviidae). *Lengran Sci. J.* 13(3):503-515.